
A New Combination in *Psilanthus* (Rubiaceae) for Australasia, and Nomenclatural Notes on *Paracoffea*

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ABSTRACT. The combination *Psilanthus brassii* (J.-F. Leroy) A. P. Davis, based on the basionym *Paracoffea brassii* J.-F. Leroy, is proposed. Herbarium research shows that *Psilanthus brassii* (Rubiaceae, Coffeae) occurs in northeastern Australia and Papua New Guinea. Nomenclatural notes on the genus *Paracoffea* J.-F. Leroy, a generic synonym of *Psilanthus* Hooker f., are provided.

Key words: Australia, *Coffea*, coffee, Coffeae, Papua New Guinea, *Paracoffea*, *Psilanthus*, Rubiaceae.

The genus *Paracoffea* was described by Leroy (1967) to accommodate a group of 19 species from Africa, Madagascar, and Asia, most of which were previously placed in *Coffea* L. (e.g., see Chevalier, 1947). According to authors working on *Coffea* and related genera, for example, Bridson (1987: 454) and Robbrecht (1981: 359), the genus was not validly published. The contentious point in the valid publication of *Paracoffea* (Bridson, pers. comm.) was that Leroy's new combination (based on *Coffea* sect. *Paracoffea* Miquel) did not cite the full reference for the basionym. However, in the publication of *Paracoffea* (Leroy, 1967) the genus name is followed by "gen. nov." and a Latin diagnosis: Leroy is describing a new genus and not making a new combination. The holotype is given as *Coffea* sect. *Paracoffea* Miquel, which provides an indirect reference to the type (ICBN: Art. 37.3; Greuter et al., 2000); in a footnote of a later paper (Leroy, 1968b: 606), a direct reference to the type species of *Paracoffea* is given (i.e., *Coffea horsfieldiana* Miquel). *Paracoffea* J.-F. Leroy is thus validly published.

In the same publication as *Paracoffea*, Leroy (1967) proposed 19 species-level combinations and three new subgenera for *Paracoffea* (subg. *Insulanparacoffea*, subg. *Afroparacoffea*, and subg. *Melanoparacoffea*; see Appendix 1). However, all these names are invalid because the basionyms for the new combinations are not provided, and the subgenera are unaccompanied by descriptions or reference to published descriptions. Leroy's 19 invalid combinations in *Paracoffea* represent species now

placed in *Psilanthus*, *Coffea* subg. *Baracoffea*, and *Prismatomeris* Thwaites (see below). Shortly afterward, Leroy added two more species to *Paracoffea*: *P. brassii* J.-F. Leroy from Papua New Guinea (Leroy, 1968a) and *P. floresiana* (Boerlage) J.-F. Leroy from Flores, Indonesia (Leroy, 1968b). *Paracoffea merguensis* (H. N. Ridley) J.-F. Leroy, an additional Asian species, was added several years later (Leroy, 1972).

After consideration of African *Coffea* relatives, Leroy (1980a, 1980b) decided to place most species of *Paracoffea* into the genus *Psilanthus* Hooker f., as he considered these two genera to be congeneric. Leroy (1980a) proposed the recognition of *Psilanthus* subg. *Paracoffea* (Miquel) J.-F. Leroy (based on *Coffea* sect. *Paracoffea* Miquel) for species from Africa, Asia, and New Guinea that were formerly placed in the genus *Paracoffea*. Unfortunately, Leroy overlooked *Coffea* subg. *Afrocoffea* Moens (1962), which predates and competes with the use of *Paracoffea* at subgeneric rank (Bridson, 1987; and see Appendix 1). The placement of *Paracoffea* species in *Psilanthus* subg. *Afrocoffea* has been upheld by those working on the taxonomy of *Coffea* and *Psilanthus* (e.g., Bridson, 1987, 1988a, 1988b; Sivarajan et al., 1992; Stoffelen et al., 1997; Stoffelen, 1998). Four of Leroy's (1967) 19 invalid combinations in *Paracoffea* (viz. "*P. grevei*," "*P. humbertii*," "*P. capuronii*," and "*P. decaryana*") were later placed in *Coffea* subg. *Baracoffea* (Leroy, 1980a, 1980b, 1981); "*Paracoffea malayana*" has been assigned to *Prismatomeris*, provisionally as *P.* sp. (Wong, 1989).

Where appropriate (i.e., excluding *Coffea* subg. *Baracoffea*) Leroy made combinations in *Psilanthus* for the species that he had previously placed in *Paracoffea* (Leroy, 1981; Lobreau-Callen & Leroy, 1980) except for *Paracoffea brassii* (as indicated by Bridson, 1987). *Paracoffea brassii* possesses the key features of *Psilanthus* subg. *Afrocoffea*, including: seasonally indeterminate axillary inflorescences (followed by terminal inflorescences via the production of relay axes); stiff and awn-like stipular lobes on the middle calyculus (see Davis & Rak-

otonasolo, 2000, for inflorescence terminology); leaf-like lobes on the upper calyculus; a long corolla tube (more than three times longer than the lobes); anthers included; style very short (lobes positioned distinctly below anthers at the base of the corolla tube); and a laterally compressed fruit.

Based on the above evidence, I propose the following new combination in *Psilanthus*.

Psilanthus brassii (J.-F. Leroy) A. P. Davis, comb. nov. Basionym: *Paracoffea brassii* J.-F. Leroy, J. Agric. Trop. Bot. Appl. 14: 598. 1967 [1968]. TYPE: Papua New Guinea. Central Province: Baroka, Nakeo District, 30 m, 8 Apr. 1933, L. J. Brass 3743 (holotype, BO; isotype, A).

Distribution and habitat. Papua New Guinea (Central Province) and Australia (Torres Strait Island and Queensland). Monsoon forest, deciduous monsoon scrublands, deciduous vine thicket, and vegetation on stabilized dunes; elevation 15–150 m.

Phenology. Flowering September to December; fruiting February to May.

Conservation status—*IUCN Red List Category.* **Least Concern** (LC). This is a relatively widespread species, although low collecting frequency infers that further work is required to assess local vulnerability.

Additional material examined. PAPUA NEW GUINEA. **Central Province:** Tovobada Hills, ca. 9 mi. [15 km] NNW of Port Moresby, ca. 500 ft. [152 m], 14 May 1967, Pullen 6980 (A, BO, BRI, CANB, K, L, LAE, US); near SE side of Little Mount Lawes, ca. 16 mi. [26 km] N of Port Moresby, ca. 150 ft. [46 m], 25 Apr. 1967, Pullen 6814 (A, BRI, CANB, K, L, LAE); Kanosia, ca. 50 ft. [15 m], 9 Feb. 1935, Carr 11220 (K); Port Moresby sub-district, below Vetorogu Hill, Tovobada Peaks, 3 km N of Barune, 60 m, 24 May 1974, Frodin & Field Botany Class UPNG 4323 (K). AUSTRALIA. **Torres Strait Is.:** Sunday Island, June 1821, Cunningham 7 (K); Sunday Island, s.c. s.n. (K). **Queensland:** Cook District, 1 km S of Sieisia, 21 Nov. 1999, Wannan NSW 443387 (BRI, NSW).

Notes. *Psilanthus brassii* is similar to *P. mabesae* (Elmer) J.-F. Leroy from the Philippines, but differs in that its leaves, flowers (corolla), and fruits are glabrous (not puberulous to pubescent as in *P. mabesae*). Herbarium and literature studies indicate that *P. brassii* is the only species of *Psilanthus* occurring in Papua New Guinea and Australia.

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Appendix 1. Outline classification of *Coffea* and *Psilanthus*.

Coffea L., Sp. Pl.: 172. 1753.

Coffea subg. **Coffea** L. TYPE: *Coffea arabica* L.

Around 90 species. Africa, Madagascar, Mascarenes.

Coffea subg. *Psilanthopsis* (A. Chevalier) J.-F. Leroy, Ass. Sci. Internat. Café, (ASIC) 9th Colloque: 475. 1980. *Psilanthopsis* A. Chevalier, J. Agric. Trop. Bot. Appl. 19: 404. 1939. TYPE: *Coffea kapakata* (A. Chevalier) Bridson.

Monotypic. Africa (Angola).

Paolia Chiovenda, Result. Sci. Miss. Stenfan. -Paoli Somal. Ital. 1: 93. 1916. TYPE: *Paolia jasminoides* Chiovenda (= *Coffea rhamnifolia* (Chiovenda) Bridson).

Monotypic. Africa (Somalia and Kenya).

Coffea subg. **Baracoffea** (J.-F. Leroy) J.-F. Leroy, Ass. Sci. Internat. Café, (ASIC) 9th Colloque: 475. 1980. *Coffea* sect. *Baracoffea* J.-F. Leroy, Comp. Rend. Acad. Sci. Paris 252: 2287. 1961. TYPE: *Coffea humbertii*.

Seven species (including four undescribed). Madagascar.

[*Paracoffea* subg. *Insulanoparacoffea* J.-F. Leroy, J. Agric. Trop. Bot. Appl. 14: 276 (1967), nom. nud.]

Psilanthus Hooker f., Gen. Pl.: 115. 1873.

Psilanthus subg. **Psilanthus** Hooker f. TYPE: *Psilanthus mannii* Hooker f.

Two species. Africa (central and western).

Psilanthus subg. **Afrocoffea** (Moens) Bridson, Kew Bull. 42: 454. 1987. *Coffea* subg. *Afrocoffea* Moens, Bull. Jard. Bot. Brux. 32: 131. 1962. TYPE: *Psilanthus lebrunianus* (Germain & Kesler) Bridson.

About 17 species. Africa, Asia, Australasia.

Coffea sect. *Paracoffea* Miquel, Fl. Ind. Batavae: 308. 1856. *Psilanthus* subg. *Paracoffea* (Miquel) J.-F. Leroy, Ass. Sci. Internat. Café, (ASIC) 9th Colloque: 475. 1980. TYPE: *Coffea horsfieldiana* Miquel.

Paracoffea J.-F. Leroy, J. Agric. Trop. Bot. Appl. 14: 276. 1967. TYPE: *Coffea horsfieldiana* Miquel.

[*Paracoffea* subg. *Afroparacoffea* J.-F. Leroy, J. Agric. Trop. Bot. Appl. 14: 276 (1967), nom. nud.]

[*Paracoffea* subg. *Melanoparacoffea* J.-F. Leroy, J. Agric. Trop. Bot. Appl. 14: 276 (1967), nom. nud.]